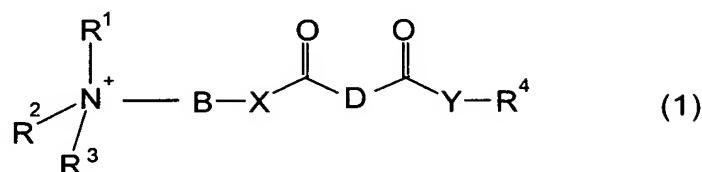


What is claimed is:

1. The use of compounds of the formula (1)



where

- $\text{R}^1, \text{R}^2$  are each independently  $\text{C}_1$ - to  $\text{C}_{22}$ -alkyl,  $\text{C}_2$ - to  $\text{C}_{22}$ -alkenyl,  $\text{C}_6$ - to  $\text{C}_{30}$ -aryl or  $\text{C}_7$ - to  $\text{C}_{30}$ -alkylaryl,
- $\text{R}^3$  is  $\text{C}_1$ - to  $\text{C}_{22}$ -alkyl,  $\text{C}_2$ - to  $\text{C}_{22}$ -alkenyl,  $\text{C}_6$ - to  $\text{C}_{30}$ -aryl or  $\text{C}_7$ - to  $\text{C}_{30}$ -alkylaryl,  $-\text{CHR}^5-\text{COO}^-$  or  $-\text{O}^-$ ,
- $\text{R}^4$  is M, hydrogen or an organic radical which optionally contains heteroatoms and has from 1 to 100 carbon atoms,
- B is an optionally substituted  $\text{C}_1$ - to  $\text{C}_{30}$ -alkylene group,
- D is an organic radical which optionally contains heteroatoms and has from 1 to 600 carbon atoms,
- X, Y are each independently O or  $\text{NR}^6$ ,
- $\text{R}^5, \text{R}^6$  are each independently hydrogen,  $\text{C}_1$ - to  $\text{C}_{22}$ -alkyl,  $\text{C}_2$ - to  $\text{C}_{22}$ -alkenyl,  $\text{C}_6$ - to  $\text{C}_{30}$ -aryl or  $\text{C}_7$ - to  $\text{C}_{30}$ -alkylaryl, and
- M is a cation

as gas hydrate inhibitors.

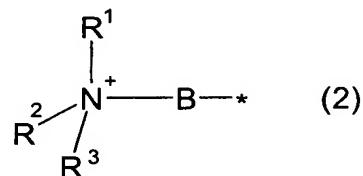
2. The use as claimed in claim 1, wherein B contains hydroxyl groups.
3. The use as claimed in claim 1 and/or 2, wherein B is a  $\text{C}_2$ - to  $\text{C}_4$ -alkylene group.
4. The use as claimed in one or more of claims 1 to 3, wherein  $\text{R}^1$  and  $\text{R}^2$

are each independently an alkyl or alkenyl group of from 2 to 14 carbon atoms.

5. The use as claimed in one or more of claims 1 to 4, wherein R<sup>3</sup> is an alkyl or alkenyl group having from 1 to 12 carbon atoms.

6. The use as claimed in one or more of claims 1 to 5, wherein R<sup>5</sup> and R<sup>6</sup> are hydrogen.

7. The use as claimed in one or more of claims 1 to 6, wherein R<sup>4</sup> is a radical of the formula (2)

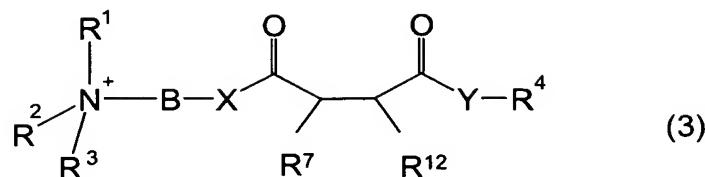


where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and B are each as defined in claim 1.

8. The use as claimed in one or more of claims 1 to 7, wherein D is a C<sub>2</sub>- to C<sub>50</sub>-alkylene or C<sub>2</sub>- to C<sub>50</sub>-alkenylene group.

9. The use as claimed in one or more of claims 1 to 7, wherein D is derived from substituted succinic acid derivatives having from 10 to 100 carbon atoms.

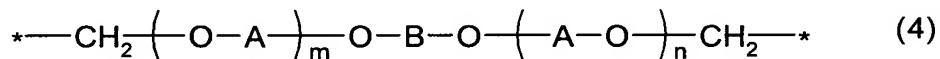
10. The use as claimed in one or more of claims 1 to 7, wherein D is a radical of the formula (3)



where

$\text{R}^7$  and  $\text{R}^{12}$  are each either hydrogen or a  $\text{C}_2$ - to  $\text{C}_{100}$ -alkyl or  $\text{C}_2$ - to  $\text{C}_{100}$ -alkenyl radical which is obtainable as an oligomer of  $\text{C}_2$ - to  $\text{C}_8$ -alkenes and may be straight-chain or branched, with the proviso that exactly one of the  $\text{R}^7$  and  $\text{R}^{12}$  radicals is hydrogen, and  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{X}$ ,  $\text{Y}$  and  $\text{B}$  are each as defined in claim 1.

11. The use as claimed in one of more of claims 1 to 7, wherein D is a radical of the formula (4)



where A is a  $\text{C}_2$ - to  $\text{C}_4$ -alkylene group which may be straight-chain or branched, m and n are each independently a number in the range from 0 to 30 and B is as defined in claim 1.